

1 ABSTRACT

2 A method for cylindrical processing of an optical medium, including optical fiber and
3 optical materials of substantially cylindrical form. The method of the preferred embodiments
4 includes the steps of rotating an optical medium about a longitudinal relative rotation axis thereof
5 relative to a processing tool; spatially selectively applying the processing tool to a portion of a
6 surface of the optical medium in operative cooperation with relative rotation of the optical
7 medium and the processing tool, thereby producing a patterned (i.e., spatially selective)
8 structural alteration of the optical medium, the pattern including altered, differentially-altered
9 and unaltered portions of the optical medium. Specialized techniques for spatially selectively
10 generating the structural alteration may include masking/etching, masking/deposition, machining
11 or patterning with lasers or beams, combinations thereof, and/or functional equivalents thereof.

